REMARKS

Claims 14 to 34 are pending in this application. Claims 1 to 13 were previously canceled. Claims 14 to 26 and 31 to 34 have been withdrawn from consideration. Claims 27 and 29 are currently amended. Reconsideration of the application is requested in view of the amendments and following remarks.

Claim Amendments

Claims 27 and 29 have been amended to recite the elements of the claims from which they had depended and to further clarify the invention. Support for the changes can be found in the originally-filed claims. No new matter is added by these changes.

§ 112 Rejection

Claim 29 stands rejected under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regards as the invention. In particular, the Examiner asserts that the word "obtainable" makes the claim indefinite. Applicants have reworded the claim to make it clearer and have eliminated the word "obtainable." Thus, Applicants submit that the § 112 rejection of claim 29 has been overcome and should be withdrawn.

§ 102 Rejection

Claim 29 stands rejected under 35 USC § 102(b) as being anticipated by Garcia et al. (U.S. 6,464,765). Applicants respectfully traverse this rejection.

Garcia describes a method for coloring ceramics using a saturated soluble salt slurry that contains solid particles (column 1, lines 38 to 45). Garcia teaches that the slurry comprise from about 50 to about 90 parts by weight of solid particles (column 3, lines 12 to 15). In the Examples given in Table 1, column 6, of Garcia, the slurries contain 70 parts by weight particles and 35 parts by weight ammonia.

In contrast, the ceramic framework of the present invention is treated with a composition containing a solvent, a metal salt or metal complex in an amount of 0.01 to 7.0 wt.-%, and a specified amount of 10,000-50,000 Mn polyethylene glycol. The Examiner acknowledges that

"Garcia et al. does not teach the use of 10,000-50,000 Mn polyethylene glycol" and also "does not teach the precise percent of metal in the solution" (Office Action, p. 3). However, the Examiner asserts that these components "will be driven off during the firing process" and thus "the resultant product will be expected to be similar [to the product claimed in claim 29] absent any evidence to the contrary." Applicants disagree.

Even if the firing process might be expected to drive off the polyethylene glycol and the solvent, the metal component of the solution would generally be expected to remain in the ceramic framework. Although the metal content of the final ceramic framework may depend on several factors (e.g. process conditions, shape of the product, etc.), the concentration of metal/metal ions in the coloring solution would clearly be a significant factor. Since the metal content of the coloring solution recited in claim 29 is substantially different from the metal content of the slurry described in Garcia, there is no reason to assume that the Garcia product would have a metal content after firing that is "similar" to that recited in the present claims. If anything, one would expect the metal content of the resulting products to be different.

Furthermore, the examples in the present specification clearly demonstrate that a ceramic framework treated with a coloring solution containing 10,000-50,000 Mn polyethylene glycol, as is claimed in claim 29, is different from a ceramic framework treated with a coloring solution that does not contain polyethylene glycol. In particular, the examples describe the results obtained from a solution denoted FS5, which did not contain polyethylene glycol (PEG), compared to the results obtained from a solution denoted FS5*, which contained PEG. Ceramic frameworks were treated with these different solutions and fired under similar conditions. As compared to an uncolored ceramic framework, which showed a sintering deformation of 0.038 mm, the ceramic framework treated with the FS5 solution (without PEG) showed a sintering deformation of 0.200 mm, whereas the ceramic framework treated with the FS5* solution (with PEG) showed a sintering deformation of 0.061 mm (see Table 1 of the present specification). Thus, the different types of coloring solutions resulted in ceramic frameworks that had different characteristics, i.e. the sintering deformation of the ceramic frameworks differed significantly depending on the type of solution (with PEG vs. without PEG) that was used for coloring. This is a clear indication that the treated ceramic frameworks were different not only before firing, but also after firing. Thus,

even if the PEG is driven off in the firing process, its presence in the coloring solution applied to the framework prior to firing leads to a different final product.

In view of the above-described distinctions, Applicants respectfully submit that the product described in Garcia is different from the product of claim 29, and thus the § 102(b) rejection of this claim should be withdrawn.

§ 103 Rejections

Claims 27 and 30 stand rejected under 35 USC § 103(a) as being unpatentable over Garcia et al. (U.S. 6,464,765), in view of Williams et al. (U.S. 6,786,994), and claim 28 is similarly rejected as being unpatenable over Garcia in view of Williams, further in view of Schrewelius (U.S. 3,027,331). Applicants respectfully traverse these rejections.

Although the Examiner acknowledges that Garcia does not explicitly teach the metal concentration recited in the rejected claims or the use of a 10,000-50,000 Mn polyethylene glycol in the coloring solution, the Examiner nevertheless asserts that these features would have been obvious to a person of ordinary skill in the art. Specifically, the Examiner asserts that it would have been obvious to combine the teaching of Garcia, which describes the use of a humectant to prevent premature drying, with the teachings of Williams, which describes a humectant that can contain PEG with a molecular weight from 100 to 40,000. The Examiner thus concludes that the claimed invention is obvious in view of these references. Applicants respectfully disagree.

Although *Garcia* mentions that the slurry can comprise one or more humectants, there is no teaching or suggestion in any of the cited references that PEG might assist in reducing the sintering deformation during or after firing as demonstrated in the present invention. This is an unexpected and advantageous result not envisioned by the prior art.

As the Examiner has noted, the humectant described in Garcia is used, as the name suggests, to prevent the slurry from drying during application or storage. In the Garcia process, the slurry containing solid particles is applied first and afterwards a solvent is applied to dissolve the solid particles. In such a process, a humectant can assist in keeping the slurry wet to allow for an easier dissolution process of the solid particles. However, there is no teaching or suggestion that such a component would have an effect on sintering deformation. Thus, even if the skilled person would have combined these references (an assumption which is challenged, in